



**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q65135

Naoya HASHIMOTO, et al.

Appln. No.: 09/892,862

Confirmation No.: 3124

Group Art Unit: 2834

Filed: June 28, 2001

Examiner: Addison, K.

For: ELECTROMAGNETIC DEVICE

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**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

**IN THE CLAIMS:**

**Please enter the following amended claims:**

1. (Twice Amended) An electromagnetic device mounted to an automotive transmission and used in an oil containing sulfur, said electromagnetic device comprising:
  - an outer casing;
  - a moveable shaft supported by said outer casing;
  - a bobbin disposed inside said outer casing so as to be disposed around said moveable shaft on a common axis with said moveable shaft;
  - a coil embedded in an outer molding, said coil being constructed by winding a conducting wire onto said bobbin,

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an electrically-insulating layer coated on said conducting wire; and  
means for preventing sulfur compounds from permeating said electrically-insulating layer and attendantly reducing the formation of sulfur compounds on a surface of said conducting wire, thereby suppressing the reduction in adhesive of the electrically-insulating layer to said conducting wire, wire breakage, and short circuiting between said conducting wires,  
said preventing means comprising said electrically-insulating layer of a material resistant to permeation by sulfur compounds.